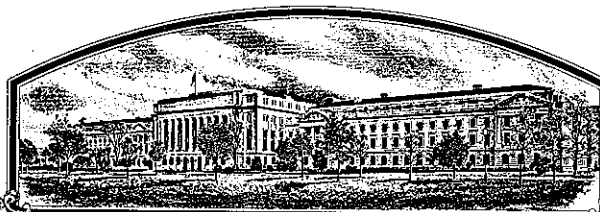


No.

8300003



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Sluis & Groot Research

Whereas, THERE HAS BEEN PRESENTED TO THE
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (U.S.C. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

CAULIFLOWER

'White Fox'



In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 27th day of February in the year of our Lord one thousand nine hundred and eighty-four.

Attest:

Kenneth A. Cowan
Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

John R. Block
Secretary of Agriculture

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, POULTRY, GRAIN & SEED DIVISION

FORM APPROVED
OMB NO. 40-R3822

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

INSTRUCTIONS: See Reverse.

1a. TEMPORARY DESIGNATION OF VARIETY SG 109		1b. VARIETY NAME White Fox		FOR OFFICIAL USE ONLY PV NUMBER 8300003	
2. KIND NAME Cauliflower		3. GENUS AND SPECIES NAME Brassica oleracea L. con- var botrytis L) Alef. var.		FILING DATE 10/19/82	TIME 11:30 A.M. P.M.
4. FAMILY NAME (BOTANICAL) Cruciferae		5. DATE OF DETERMINATION January 1976		FEE RECEIVED \$ 500.00 \$ 250.00	DATE 10/19/82 1/11/84
6. NAME OF APPLICANT(S) SLUIS & GROOT RESEARCH Koninklijke Zaaiteelt en Zaadhandel Sluis & Groot B.V. R/S 9/23/83		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) P.O.Box 13 1600 AA Enkhuizen, Netherlands		8. TELEPHONE AREA CODE AND NUMBER 02280-13838	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) Corporation			10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION Netherlands		11. DATE OF INCORPORATION 1867
12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS: Stan Rollin, Seed Consultant, 6802 Orem Drive, Laurel, MD 20810					

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- ☒ 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- ☒ 13B. Exhibit B, Novelty Statement.
- ☒ 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)
- ☐ 13D. Exhibit D, Additional Description of the Variety.

14a. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a). (If "Yes," answer 14B and 14C below.) ☐ YES ☒ NO

14b. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? ☐ YES ☒ NO

14c. IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUCTION BEYOND BREEDER SEED? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? ☒ YES ☐ NO (If "Yes," give name of countries and dates.)

Western Germany 26-10-1982

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? ☐ YES ☒ NO (If "Yes," give name of countries and dates.)

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? ☒ YES ☐ NO

17. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

11th October 1982
(DATE)

Sluis & Groot B.V., Ing. G. J. IJsselmann
(SIGNATURE OF APPLICANT)

(DATE)

(SIGNATURE OF APPLICANT)



Koninklijke Zaadteelt
en Zaadhandel
Sluis en Groot B.V.
Enkhuizen (Holland)

Exhibit A

Origin and Breeding History of the Variety - Cauliflower White Fox 830003

The original material is based on a crossing between "Wintercauliflower", "Flora Blanca" and "Alpha" received from Wageningen in 1968.

Since 1968, the breeding department has worked with group and line selection within the early group.

An acceptable standard of homogeneity has been obtained. No variants beyond the percentages shown in the attached table have been found.

In 1976 the variety was determined to be uniform and stable.



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en Zaadhandel
Sluis en Groot B.V.
Enkhuizen (Holland)

Attachment - Exhibit A

Cauliflower

White Fox

830003

	<u>August</u>	<u>800 plants total/year</u>	<u>4 fields average/year</u>
1973	small plants, light green colored off types		0,125%
	late, petioled plants		0,125%
1974	small plants, light green colored off types		0,250%
	late, petioled plants		0
1975	small plants, light green colored off types		0
	late, petioled plants		0,125%



8300003

13 B Exhibit B Novelty Statement

Cauliflower White Fox

White Fox belongs to the late summer/early autumn varieties and resembles most the variety White Summer, from which it differs by :

1. The plant is 1 cm higher than White Summer.
2. Has a more broad leaf of 3-4 cm.
3. Grows less erect.
4. The curd has more relief and is 1 cm higher.
5. Better self wrapping.
6. The leaf is more blond.
7. 2 days later in maturity.



Exhibit B Novelty Statement Cauliflower White Fox 830003

"White Fox" is most similar to "White Summer" except as follows:
annex to point 1 of Exhibit B

"The plant is 2 cm higher than White Summer"

1980

Sowing : 2nd June 1980. 3 repetitions. 48 plants/ object.

Readings : 1st September 1980

White Summer

27 cm 10 x
28 cm 30 x
29 cm 8 x

White Fox

30 cm 31 x
31 cm 17 x 1st repetition

26 cm 5 x
27 cm 11 x
28 cm 20 x
29 cm 12 x

28 cm 7 x
29 cm 8 x
30 cm 25 x 2nd repetition
31 cm 8 x

27 cm 15 x
28 cm 30 x
29 cm 3 x

29 cm 13 x
30 cm 28 x 3rd repetition
31 cm 6 x
32 cm 1 x

1981

Sowing : 3rd June 1981. 2 repetitions. 48 plants/object.

Readings : 2nd September 1981

White Summer

28 cm 41 x
29 cm 6 x
30 cm 1 x

White Fox

29 cm 16 x
30 cm 29 x 1st repetition
31 cm 3 x



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Enkhuizen (Holland)

../2/..

cauliflower White Fox 830003
annex to point 1 of Exhibit B

White Summer

27 cm	4 x
28 cm	25 x
29 cm	11 x
30 cm	8 x

White Fox

28 cm	6 x	
29 cm	12 x	<u>2nd repetition</u>
30 cm	30 x	

1982

Sowing : 4th June 1982. 2 repetitions. 48 plants/object.

Readings : 3rd September 1982

White Summer

26 cm	2 x
27 cm	1 x
28 cm	40 x
29 cm	5 x

White Fox

29 cm	12 x	
30 cm	34 x	<u>1st repetition</u>
31 cm	2 x	

27 cm	18 x
28 cm	25 x
29 cm	5 x

30 cm	42 x	
31 cm	36 x	<u>2nd repetition</u>



Exhibit B Novelty Statement Cauliflower White Fox 830003

annex to point 2 of Exhibit B

"White Fox has a more broad leaf of 3-4 cm than White Summer"

1980

Sowing : 2nd June 1980. 3 repetitions. 48 plants/object.

Readings : 1st September 1980

White Summer

25 cm 11 x
26 cm 30 x
27 cm 7 x

24 cm 12 x
25 cm 8 x
26 cm 28 x

25 cm 6 x
26 cm 24 x
27 cm 12 x
28 cm 6 x

White Fox

28 cm 4 x
29 cm 27 x
30 cm 17 x

1st repetition

27 cm 7 x
28 cm 12 x
29 cm 29 x

2nd repetition

28 cm 13 x
29 cm 28 x
30 cm 7 x

3rd repetition

1981

Sowing : 3rd June 1981. 2 repetitions. 48 plants/object

Readings : 2nd September 1981

White Summer

25 cm 12 x
26 cm 26 x
27 cm 10 x

White Fox

28 cm 17 x
29 cm 19 x
30 cm 8 x
31 cm 4 x

1st repetition



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cauliflower White Fox 830003
annex to point 2 of Exhibit B

White Summer

26 cm 29 x
27 cm 11 x
28 cm 8 x

White Fox

29 cm 20 x
30 cm 24 x
31 cm 4 x

2nd repetition

1982

Sowing : 4th June 1982. 2 repetitions. 48 plants/object.

Readings : 3rd September 1982

White Summer

26 cm 30 x
27 cm 12 x
28 cm 6 x

White Fox

29 cm 24 x
30 cm 16 x
31 cm 8 x

1st repetition

25 cm 14 x
26 cm 30 x
27 cm 4 x

28 cm 12 x
29 cm 30 x
30 cm 6 x

2nd repetition



Exhibit B Novelty Statement Cauliflower White Fox 830003

annex to point 4 of Exhibit B

"The curd from White Fox is 1 cm higher than White Summer"

1980

Sowing : 2nd June 1980. 3 repetitions. 48 plants/object.

Readings : 1st September 1980

White Summer

88 cm 10 x
99 cm 29 x
10 cm 9 x

88 cm 16 x
9 cm 30 x
10 cm 2 x

9 cm 36 x
10 cm 12 x

White Fox

10 cm 30 x
11 cm 18 x 1st repetition

9 cm 5 x
10 cm 32 x 2nd repetition
11 cm 11 x

10 cm 35 x
11 cm 13 x 3rd repetition

1981

Sowing : 3rd June 1981. 2 repetitions. 48 plants/object.

Readings : 2nd September 1981

White Summer

88 cm 13 x
9 cm 27 x
10 cm 8 x

White Fox

9 cm 14 x
10 cm 31 x 1st repetition
11 cm 3 x



Koninklijke Zaadteelt
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Enkhuizen (Holland)

Cauliflower White Fox 830003
annex to point 4 of Exhibit B

../2/..

White Summer

9 cm	28 x
10 cm	14 x
11 cm	6 x

White Fox

9 cm	5 x
10 cm	36 x
11 cm	7 x

2nd repetition

1982

Sowing : 4th June 1982. 2 repetitions. 48 plants/object.

Readings : 3rd September 1982

White Summer

8 cm	7 x
9 cm	27 x
10 cm	14 x

White Fox

9 cm	5 x
10 cm	36 x
11 cm	7 x

1st repetition

9 cm	39 x
10 cm	9 x

10 cm	37 x
11 cm	11 x

2nd repetition



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Exhibit B Novelty Statement Cauliflower White Fox 830003

annex to point 6 of Exhibit B

"The leaf of White Fox is more blond than White Summer"

Color chart number:	White Fox	RHS 136B
	White Summer	RHS 137A



Exhibit B Novelty Statement Cauliflower White Fox 830003

annex to point 7 of Exhibit B

"White Fox is 2 days later in maturity than White Summer"

1980

Sowing date I 26th May 1980

II 2nd June 1980

100 plants/number 2 repetitions

Number of growing days

50% plants harvest

White Summer I 123 days II 133 days

average 128 days

White Fox I 125 days II 135 days

average 130 days

1981

Sowing date I 3rd June 1981

II 10th June 1981

100 plants/number 2 repetitions

Number of growing days

50% plants harvest

White Summer I 128 days II 132 days

average 130 days

White Fox I 129 days II 135 days

average 132 days

1982

Sowing date I 28th May 1982

II 4th June 1982

100 plants/number 2 repetitions

Number of growing days

50% plants harvest

White Summer I 129 days II 135 days

average 132 days

White Fox I 131 days II 137 days

average 134 days

NAME OF APPLICANT(S)

VARIETY NAME OR TEMPORARY DESIGNATION	White Fox
---------------------------------------	-----------

ADDRESS (Street and No., or F.F.D. No., City, State, and ZIP Code)

P.O.Box 13,
1600 AA Enkhuizen, Netherlands

FOR OFFICIAL USE ONLY

PVPO NUMBER

8300003

Place the appropriate number that describes the varietal character of this variety in the boxes below. Place a zero in first box (e.g., **089** or **09**) when number is either 99 or less or 9 or less.

1. REGION OF ADAPTATION: (Where best adapted in the U.S.A.)

6 1 = NORTHWEST 2 = NORTHCENTRAL 3 = NORTHEAST 4 = SOUTHEAST 5 = SOUTHWEST
6 = MOST REGIONS

2. SEASON: (Main crop)

4 1 = LATE FALL - EARLY WINTER 2 = LATE WINTER - EARLY SPRING
3 = LATE SPRING - EARLY SUMMER 4 = LATE SUMMER - EARLY FALL

3. **TURITY:** (Days to 50% harvest)

1 0 2 FROM TRANSPLANTS

1 3 2 FROM DIRECT SEEDING

1 6 NO. DAYS HARVESTING PERIOD

4. PLANT HEIGHT: (At harvest)

<div><div>3</div><div>0</div></div>	CM. FROM SOIL LINE TO TOP OF CURD	
<div><div>0</div><div>4</div></div>	CM. TALLER THAN	<div><div>2</div></div> } 1 = EARLY ERFURT 2 = SUPER SNOWBALL A 3 = SNOWBALL Y 4 = VEITCH AUTUMN GIANT 5 = OTHER (Specify) _____
<div><div>0</div><div>1</div></div>	CM. SHORTER THAN	<div><div>4</div></div> }

5. LEAVES:

<div style="border: 1px solid black; padding: 2px; display: inline-block;">2</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">6</div>		TOTAL NUMBER	<div style="border: 1px solid black; padding: 2px; display: inline-block;">5</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">7</div>		CM. AVERAGE LENGTH AT MID-POINT OF PLANT (Including Petiole)
			<div style="border: 1px solid black; padding: 2px; display: inline-block;">2</div> <div style="border: 1px solid black; padding: 2px; display: inline-block;">9</div>		CM. AVERAGE WIDTH AT MID-POINT OF PLANT
<div style="border: 1px solid black; padding: 2px; display: inline-block;">1</div>	1 = STRAIGHT MARGINS	2 = WAVY MARGINS	<div style="border: 1px solid black; padding: 2px; display: inline-block;">2</div>	1 = THIN VEINS	2 = THICK VEINS
<div style="border: 1px solid black; padding: 2px; display: inline-block;">1</div>	1 = MOSTLY SESSILE	2 = MOSTLY PETIOLATE			
	3 = EQUALLY SESSILE AND PETIOLATE				
<div style="border: 1px solid black; padding: 2px; display: inline-block;">3</div>	COLOR:	1 = LIGHT GREEN	2 = MEDIUM GREEN (Snowball No. 10)	<div style="border: 1px solid black; padding: 2px; display: inline-block;">2-3</div>	1 = UPRIGHT, EXPOSE CURD
		3 = DARK GREEN (Lecert Group)	4 = BLUSH GREEN (November)		2 = INCURVED, PARTIALLY COVER CURD
					3 = COMPLETELY COVER CURD (Self blanching)

6. CURD:

2	0	CM. DIAMETER	1	0	CM. DEPTH
---	---	--------------	---	---	-----------

- 1 1 = TIGHT 2 = LOOSE 3 SHAPE: 1 = FLAT 2 = SEMI-DOME 3 = DOME
- 2 1 = SMOOTH 2 = KNOBBY
- 2 COLOR: 1 = BRIGHT WHITE 2 = CREAMY, DULL WHITE 3 = PURPLE-GREEN 1 1 = NO LEAVES IN CURD 2 = LEAVES IN CURD

7. DISEASE RESISTANCE: (0 = Not Tested; 1 = Susceptible, 2 = Resistant. Specify race if known)

- | | |
|--|---|
| <input type="checkbox"/> 0 BLACK SPOT | <input type="checkbox"/> 0 CLUBROOT |
| <input type="checkbox"/> 0 PHYTOPHTHORA ROOT ROT | <input type="checkbox"/> 0 WHITE BLISTER |
| <input type="checkbox"/> 0 BLACK ROT | <input type="checkbox"/> 0 BOTTOM ROT |
| <input type="checkbox"/> 0 CERCOSPORELLA LEAF SPOT | <input type="checkbox"/> 0 DOWNY MILDEW |
| <input type="checkbox"/> 0 POWDERY MILDEW | <input type="checkbox"/> 0 VERTICILLUM WILT |
| <input type="checkbox"/> 0 BLACK LEG | <input type="checkbox"/> 0 CAULIFLOWER MOSAIC |
| <input type="checkbox"/> 0 RING SPOT | <input type="checkbox"/> 0 TURNIP YELLOW MOSAIC |
| <input type="checkbox"/> 0 YELLOWS | <input type="checkbox"/> 0 WIRE STEM |
| <input type="checkbox"/> 0 OTHER (Specify) _____ | |

8. OTHER RESISTANCE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

- | | |
|---|--|
| <input type="checkbox"/> 2 "BUTTONING" | <input type="checkbox"/> 0 "BLINDNESS" |
| <input type="checkbox"/> 2 "RICEYNESS" | <input type="checkbox"/> 0 "WHIPTAIL" |
| <input type="checkbox"/> 0 INSECT (Specify) _____ | |

9. DICATE A VARIETY THAT MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	VARIETY	CHARACTER	VARIETY
MATURITY	White Summer	PLANT COLOR	White Summer
ADAPTATION	White Summer	CURD SIZE	Oze
PLANT HABIT	Oze	CURD SHAPE	White Summer
PLANT SIZE	Oze	CURD COLOR	White Summer

REFERENCE:

Nieuwhof, M. 1969. Cole Crops - World Crop Series, Leonard Hill.

COMMENTS:



Koninklijke Zaadteelt
en Zaadhandel
Sluis en Groot B.V.
Enkhuizen (Holland)

Exhibit D Additional information Cauliflower White Fox 830003

1. White Fox grows less erect than White Summer
2. White Fox has more relief on the curd than White Summer
3. White Fox is better self-wrapping than White Summer

